BRUHAT BANGALORE MAHANAGARA PALIKE, YELAHANKA ZONE

Executive Engineeer
Byatarayanapura Division
B.B.M.P., Bangalore - 92

DRAFT TENDER SCHEDULE

Issued to :

Original / Duplicate
Item No.

Name of Work:Estimate for the Work of Providing and laying (400mm and 500 mm dia RCC NP3 Class pipe) UGD Line in side the SWD Thanisandra Ward-6 Byatarayanapura

Sl No	Description of Work	Units	Qty	Rate, in Rupees	
				Figure	In words
1	EXCAVATING FOR PIPE LINE TRENCHES OF REQUIRED WIDTH by mechanical / & manual means including dressing sides, ramming of bottoms, providing barricading, danger lighting, shoring, strutting, dewatering, etc. IN ALL KINDS OF SOIL MIXED WITH BOULDERS of 30 cms size, etc. for: Pipes of all dia. for depth upto 2.0 M in all types of soils Note : If any shoring and strutting, will be paid separatelyas per the direction of the Engineer Incharge of the Work with all lead and lift , loading and unloading and allother incidental charges etc., complete as per specification and direction of the engineer-in-charge of the work	Cum	2705.40	167.00	Rupees One Hundred Sixty Seven Only
2	Pipes of all dia. for depth 2.0 to 4.0 M in all types of soils Note : If any shoring and strutting, will be paid separatelyas per the direction of the Engineer Incharge of the Work with all lead and lift , loading and unloading and allother incidental charges etc., complete as per specification and direction of the engineer-in-charge of the work	Cum	1284.14	225.00	Rupees Two Hundred Twenty Five Only
3	Extra charges for excavation in all classifications in watery situations or foul conditions may be paid duly obtaining approval from the Chief Engineer as under towards DEWATERING with recuperation upto two meter depth and thereof for:Excavated depth upto 2mas per the direction of the Engineer Incharge of the Work with all lead and lift , loading and unloading and allother incidental charges etc., complete as per specification and direction of the engineer-in-charge of the work	Cum	2699.40	61.00	Rupees Sixty One Only
4	Excavated depth 2 TO 4 M as per the direction of the Engineer Incharge of the Work with all lead and lift , loading and unloading and allother incidental charges etc., complete as per specification and direction of the engineer-in-charge of the work	Cum	1284.14	91.00	Rupees Ninety One Only
5	Excavation of Hard Rock /RCC by diamond rope cutting method. Using machinery like generator (electric), Hitachi (Hydraulic excavator), breaker, compressor and diamond rope with MS Rods etc, complete as per specifications and directions of the Engineer In Charge. as per the direction of the Engineer Incharge of the Work with all lead and lift , loading and unloading and allother incidental charges etc., complete as per specification and direction of the engineer-in-charge of the work	Cum	90.00	5256.00	Rupees Five Thousand Two Hundred Fifty Six Only

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6	REFILLING OF EARTH around pipelines, in layers not exceeding 20 cms. in depth, compacting each deposited layer by ramming after watering all lead and lift including cost of all labour including consolidation by mechanical means approved by the Engineer in charge, when earth is at suitable moisture content with desired field density upto 95% maximum dry density (modified heavy proctor test) for restoration of roads without settlement including HOM of machineries, complete. (The contractor shall take care while consolidating the earth, so that, pipes laid are not damaged due to mechanical compaction and shall restore the damaged pipes at his own cost, in case of damage) etc. with: Approved earth available nearby, lead upto 100 M and lift upto 1.5 M. Note: In exceptional cases, earth may be obtained from borrow pit with extra lead, duly obtaining approval from the Chief Engineer as per the direction of the Engineer Incharge of the Work with all lead and lift , loading and unloading and allother incidental charges etc., complete as per specification and direction of the engineer-in-charge of the work	Cum	2807.42	103.00	Rupees One Hundred Three Only
7	Supplying S&S RCC SPUN / VIBRATED CAST PIPES (REINFORCED) pipes NP-3 Class conforming to IS:458-1988 with latest amendments using ordinary portland cement, for sanitaryworks and conveying to work site, rolling and lowering into trenches, laying true to line and level including loading and unloading at both destinations and jointing of pipes and specials including costof specials, perfect linking of joints with jack to correct positionincluding cost of jointing materials, i.e, rubber rings conforming to IS: 5382 for S&S RCC pipes, with all leads and lifts as directed and giving necessary hydraulic test as per ISS to the required pressure and commissioning etc. complete. (Contractor will make his own arrangements for procuring water for testing). Before the execution of the work, the contractor shall carry out the survey and will be paid extra for the same as per seperate item.: **a)RCC NP3 Class pipe of 400 mm dia.** **as per the direction of the Engineer Incharge of the Work with all lead and lift , loading and unloading and allother incidental charges etc., complete as per specification and direction of the engineer-in-charge of the work**	m	615.80	1953.00	Rupees One Thousand Nine Hundred Fifty Three Only
8	Supplying S&S RCC SPUN / VIBRATED CAST PIPES (REINFORCED) pipes NP-3 Class conforming to IS:458-1988 with latest amendments using ordinary portland cement, for sanitaryworks and conveying to work site, rolling and lowering into trenches, laying true to line and level including loading and unloading at both destinations and jointing of pipes and specials including costof specials, perfect linking of joints with jack to correct positionincluding cost of jointing materials, i.e, rubber rings conforming to IS: 5382 for S&S RCC pipes, with all leads and lifts as directed and giving necessary hydraulic test as per ISS to the required pressure and commissioning etc. complete. (Contractor will make his own arrangements for procuring water for testing). Before the execution of the work, the contractor shall carry out the survey and will be paid extra for the same as per seperate item.: **a)RCC NP3 Class pipe of 500 mm dia.** **as per the direction of the Engineer Incharge of the Work with all lead and lift , loading and unloading and allother incidental charges etc., complete as per specification and direction of the engineer-in-charge of the work**	m	560.80	2415.00	Rupees Two Thousand Four Hundred Fifteen Only

Sl No	Description of Work	Units	Qty	Rate, in Rupees	
				Figure	In words
9	Construction of RCC manhole chambers of 1:1.5:3 proportion or approved type pre-cast RCC manhole chambers, constructed using form vibrators of standard type, with barricading, danger lighting and using of sight rails and boning rods wherever necessary, shoring and strutting wherever required using Ordinary Port Land Cement, using 1:1.5:3 proportion RCC with 20 mm and down graded jelly, well graded sand and steel of approved quality, 200 mm thick top concrete slab, having wall thickness and raft thickness as in approved drawings and with an offset in raft alround the chamber as in approved drawing, benching concrete with 1:6 slope towards the central drain finished smooth, including fixing and grouting of pipes, including conveying to work spot supply and fixing SFRC manhole cover and frame (Heavy duty) conforming to IS:12592 with latest amendments, on a bed of CC 1:2:4 supplying and fixing of minimum 3 mm thick encapsulated plastic footsteps (as per IS 10910) on 12 mm dia. Grade Fe-415 steel bar (as per IS 1786) staggered at 300 mm apart as detailed in Technical specifications, including sand bedding wherever required, disposal of surplus earth, watering, curing, engraving manhole number with flow direction on the inner cylindrical surface etc., complete including cost of reinforcement steel and fabrication charges and also cost and convevance of all materials, labour with all lead and lifts. The Precast RCC	No	5.00	30960.00	Rupees Thirty Thousand Nine Hundred Sixty Only
10	Construction of RCC manhole chambers of 1:1.5:3 proportion or approved type pre-cast RCC manhole chambers, constructed using form vibrators of standard type, with barricading, danger lighting and using of sight rails and boning rods wherever necessary, shoring and strutting wherever required using Ordinary Port Land Cement, using 1:1.5:3 proportion RCC with 20 mm and down graded jelly, well graded sand and steel of approved quality, 200 mm thick top concrete slab, having wall thickness and raft thickness as in approved drawings and with an offset in raft alround the chamber as in approved drawing, benching concrete with 1:6 slope towards the central drain finished smooth, including fixing and grouting of pipes, including conveying to work spot supply and fixing SFRC manhole cover and frame (Heavy duty) conforming to IS:12592 with latest amendments, on a bed of CC 1:2:4 supplying and fixing of minimum 3 mm thick encapsulated plastic footsteps (as per IS 10910) on 12 mm dia. Grade Fe-415 steel bar (as per IS 1786) staggered at 300 mm apart as detailed in Technical specifications, including sand bedding wherever required, disposal of surplus earth, watering, curing, engraving manhole number with flow direction on the inner cylindrical surface etc., complete including cost of reinforcement steel and fabrication charges and also cost and	m	4.25	16413.00	Rupees Sixteen Thousand Four Hundred Thirteen Only
11	Construction of RCC manhole chambers of 1:1.5:3 proportion or approved type pre-cast RCC manhole chambers, constructed using form vibrators of standard type, with barricading, danger lighting and using of sight rails and boning rods wherever necessary, shoring and strutting wherever required using Ordinary Port Land Cement, using 1:1.5:3 proportion RCC with 20 mm and down graded jelly, well graded sand and steel of approved quality, 200 mm thick top concrete slab, having wall thickness and raft thickness as in approved drawings and with an offset in raft alround the chamber as in approved drawing, benching concrete with 1:6 slope towards the central drain finished smooth, including fixing and grouting of pipes, including conveying to work spot supply and fixing SFRC manhole cover and frame (Heavy duty) conforming to IS:12592 with latest amendments, on a bed of CC 1:2:4 supplying and fixing of minimum 3 mm thick encapsulated plastic footsteps (as per IS 10910) on 12 mm dia. Grade Fe-415 steel bar (as per IS 1786) staggered at 300 mm apart as detailed in Technical specifications, including sand bedding wherever required, disposal of surplus earth, watering, curing, engraving manhole number with flow direction on the inner cylindrical surface etc., complete including cost of reinforcement steel and fabrication charges and also cost and	No	30.00	47373.00	Rupees Forty Seven Thousand Three Hundred Seventy Three Only

Sl No	Description of Work	Units	Qty	Rate, in Rupees	
				Figure	In words
12	Construction of RCC manhole chambers of 1:1.5:3 proportion or approved type pre-cast RCC manhole chambers, constructed using form vibrators of standard type, with barricading, danger lighting and using of sight rails and boning rods wherever necessary, shoring and strutting wherever required using Ordinary Port Land Cement, using 1:1.5:3 proportion RCC with 20 mm and down graded jelly, well graded sand and steel of approved quality, 200 mm thick top concrete slab, having wall thickness and raft thickness as in approved drawings and with an offset in raft alround the chamber as in approved drawing, benching concrete with 1:6 slope towards the central drain finished smooth, including fixing and grouting of pipes, including conveying to work spot supply and fixing SFRC manhole cover and frame (Heavy duty) conforming to IS:12592 with latest amendments, on a bed of CC 1:2:4 supplying and fixing of minimum 3 mm thick encapsulated plastic footsteps (as per IS 10910) on 12 mm dia. Grade Fe-415 steel bar (as per IS 1786) staggered at 300 mm apart as detailed in Technical specifications, including sand bedding wherever required, disposal of surplus earth, watering, curing, engraving manhole number with flow direction on the inner cylindrical surface etc., complete including cost of reinforcement steel and fabrication charges and also cost and	m	19.50	16515.00	Rupees Sixteen Thousand Five Hundred Fifteen Only
13	Construction of RCC manhole chambers of 1:1.5:3 proportion or approved type pre-cast RCC manhole chambers, constructed using form vibrators of standard type, with barricading, danger lighting and using of sight rails and boning rods wherever necessary, shoring and strutting wherever required using Ordinary Port Land Cement, using 1:1.5:3 proportion RCC with 20 mm and down graded jelly, well graded sand and steel of approved quality, 200 mm thick top concrete slab, having wall thickness and raft thickness as in approved drawings and with an offset in raft alround the chamber as in approved drawing, benching concrete with 1:6 slope towards the central drain finished smooth, including fixing and grouting of pipes, including conveying to work spot supply and fixing SFRC manhole cover and frame (Heavy duty) conforming to IS:12592 with latest amendments, on a bed of CC 1:2:4 supplying and fixing of minimum 3 mm thick encapsulated plastic footsteps (as per IS 10910) on 12 mm dia. Grade Fe-415 steel bar (as per IS 1786) staggered at 300 mm apart as detailed in Technical specifications, including sand bedding wherever required, disposal of surplus earth, watering, curing, engraving manhole number with flow direction on the inner cylindrical surface etc., complete including cost of reinforcement steel and fabrication charges and also cost and convevance of all materials, labour with all lead and lifts. The Precast RCC	Nos	7.00	63888.00	Rupees Sixty Three Thousand Eight Hundred Eighty Eight Only
14	Conducting the level and strip of SURVEY of alignment of Main sewers of required diameter including all data required for generating GIS map of sewer network, preparation and submission of plan and LS with ground level at 30 M intervals and junction points along the centre line of the alignment etc. showing the right of way, any permanent features, culverts, branch sewer pipe etc. complete as per specifications and as directed by the Engineer in charge with all leadand lifts etc. complete for:: Sewer pipes above 300 mm dia. as per the direction of the Engineer Incharge of the Work with all lead and lift , loading and unloading and allother incidental charges etc., complete as per specification and direction of the engineer-in-charge of the work	RMT	1288.00	28.00	Rupees Twenty Eight Only
15	HC Water pumpset (3500 Ltr / Hr) as per the direction of the Engineer Incharge of the Work with all lead and lift , loading and unloading and allother incidental charges etc., complete as per specification and direction of the engineer-in-charge of the work	Day	135.00	775.00	Rupees Seven Hundred Seventy Five Only

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				Figure	In words
16	Excavation for ramming / jacking pits and receiving pit. The work includes cutting of asphalted/ concrete surface, excavation in all types of soil and strata, dewatering, disposal of debris, refiling the trenches with consolidation, restoration of road surface to normal surface by concreting/asphalting etc., complete.. Size up to 5 mts X 3 mts - depth up to 4 mts as per the direction of the Engineer Incharge of the Work with all lead and lift , loading and unloading and allother incidental charges etc., complete as per specification and direction of the engineer-in-charge of the work	NOS	1.00	163930.00	Rupees One Lakh Sixty Three Thousand Nine Hundred Thirty Only
17	Installation of product pipe by manual jacking method - Manufacturing, providing, transporting, rolling, lowering, laying & jointing, testing, commissioning of ERW (Electric Resistance Welded), SAW (Submerged Arc Welded) MS pipe (Fe-410 grade) conforming to IS 3589-2001 with latest amendments including perfect linking welding of joints to correct position including cost and conveyance of pipes and materials with all lea., lift, cost of labour, loading and unloading of pipes for the following diameters with specified thickness of plate as noted below including bailing out of water wherever necessary for laying of MS carrier pipe of suitable dia including inside and outside of casing pipe painted with two coats of Anti corrossive tankmastic paint. Installation of steel pipe by Ramming / Jacking method to cross Railway track / NH /BDA /BBMP/Other roads/Existing utilities / NALA crossings, filling the gap between casing pipe and carrier pipe with quarry grit using compressor with all necessary equipments, plants etc, complete. Suitable spacers 0f HDP/MS or other similar material should be provided in between carrier & casing pipe to prevent carrier pipe forming metallic contact with casing pipe. The rates are inclusive of	RMT	30.00	28833.00	Rupees Twenty Eight Thousand Eight Hundred Thirty Three Only
	KPWD SR ITEMS				
18	KSRB 2.8 : Providing and filling in foundation with granite / trap broken metal 100 mm. and down size, with approved sand including hand packing, ramming, watering, including cost of all materials and labour with all lead and lift. complete as per specifications. specification No. KBS. Bedding for pipelineas per the direction of the Engineer Incharge of the Work with all lead and lift , loading and unloading and allother incidental charges etc., complete as per specification and direction of the engineer-in-charge of the work	Cum	202.90	2574.74	Rupees Two Thousand Five Hundred Seventy Four and Paise Seventy Four Only
19	Disposal off the excess excavated earth of all types by vehicle including loading, unloading with all lead and lifts, labour, HOM of machineries etc. for: Distance of 5 KMas per the direction of the Engineer Incharge of the Work with all lead and lift , loading and unloading and allother incidental charges etc., complete as per specification and direction of the engineer-in-charge of the work	Cum	1182.12	193.00	Rupees One Hundred Ninety Three Only
20	KSRB 4-2.2 : Providing and laying in position reinforced cement concrete of design mix M20 with OPC cement @ 320kgs, with 20mm and down size graded granite metal coarse aggregates @0.69 cum and fine aggregates@0.460 cum, with super plasticisers @ 3 liters confirming to IS9103-1999 Reaffirmed-2008, machine mixed, concrete laid in layers not exceeding 15 cms thick, vibrated for all works in foundation for footings, pedastals, retaining walls, return walls, walls (any thickness) including attached plasters, columns, piers, abutments, pillars, posts, struts, buttresses, bed blocks, anchor blocks, plinths etc., including cost of all materials, labour, HOM machinery, curing, complete but excluding cost of reinforcement as per specifications. Specification No. KBS 4.1, 4.6 as per the direction of the Engineer Incharge of the Work with all lead and lift , loading and unloading and allother incidental charges etc., complete as per specification and direction of the engineer-in-charge of the work	Cum	96.08	5998.54	Rupees Five Thousand Nine Hundred Ninety Eight and Paise Fifty Four Only

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				Figure	In words
21	KSRB 4-6.5 : Providing and removing centering, shuttering, strutting, propping etc., for columns, pillars, post and struts, square / rectangular / polygon in plan including cost of all materials, labour complete as per specifications. Specification No. KBS 4.6.2 as per the direction of the Engineer Incharge of the Work with all lead and lift , loading and unloading and allother incidental charges etc., complete as per specification and direction of the engineer-in-charge of the work	Sqm	252.00	483.36	Rupees Four Hundred Eighty Three and Paise Thirty Six Only
22	KSRB 4-9.2 : Providing T.M.T steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications. Specification No. KBS 4.6.3 as per the direction of the Engineer Incharge of the Work with all lead and lift , loading and unloading and allother incidental charges etc., complete as per specification and direction of the engineer-in-charge of the work	Mt	2.00	75223.96	Rupees Seventy Five Thousand Two Hundred Twenty Three and Paise Ninety Six Only
23	Diversion of water course by providing Coffer dams or bunds or island as may be necessary for piers and abutments foundations, bailing out or pumping water during excavation and until completion etc., complete. as per the direction of the Engineer Incharge of the Work with all lead and lift , loading and unloading and allother incidental charges etc., complete as per specification and direction of the engineer-in-charge of the work	Cum	200.00	417.64	Rupees Four Hundred Seventeen and Paise Sixty Four Only

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Note:

1 Item for which no rate or price has been entered in will not be paid for by the Employer when executed and shall be deemed covered by the other rates and prices in the Bill of quantities (refer: ITB Clause 7.2 and CC Clause 33.2)

2 Unit rates and prices shall be quoted by the Tender in Indian rupees.

3 Where there is a discrepancy between the rate in figures and words the rates in words will govern (ITB Clause 19.1(a)

4 Where there is a discrepancy between the unit rate and the line item total resulting from multyplying the unit rate by quantity the unit rate quoted shall govern (ITB Clause 19.1(b))

" DTS APPROVED "

ಮುಖ್ಯ ಅಭಿಯಂತರರು
ಯಲಹಂಕ ವಲಯ
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ.